


Please type a plus sign (+) inside this box →

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		Complete if Known	
		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1045 1638
		Examiner Name	M. Elwain
Sheet 1 of 6	Attorney Docket Number	MBX 041	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
EM		5,034,322		Rogers	07-23-1991	
		5,245,023		Peoples et al.	09-14-1993	
		5,250,430		Peoples et al.	10-05-1993	
		5,268,463		Jefferson	12-07-1993	
		5,276,268		Strauch, et al.	01-14-1994	
		5,364,780		Hershey et al.	11-15-1994	
		5,420,034		Kridl, et al.	05-30-1995	
		5,464,765		Coffee, et al.	11-07-1995	
		5,530,196		Fraley, et al.	06-25-1996	
		5,591,616		Hiei et al.	01-07-1997	
		5,608,152		Kridl, et al.	03-04-1997	
		5,650,554		Moloney	07-22-1997	
		5,668,298		Waldron, et al.	09-16-1997	
		5,750,848		Kruger et al.	05-12-1998	
		5,767,378		Bojsen et al.	06-16-1998	
		5,777,200		Ryals et al.	07-07-1998	
		5,846,767		Halpin et al.	12-08-1998	
		6,011,144		Steinbuechel et al.	01-04-2000	
		6,143,952		Srienc et al.	11-07-2000	

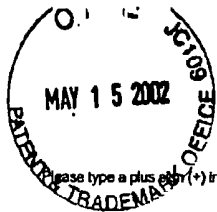
FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office. ²	Number ⁴	Kind Code ⁵ (if known)				
EW		EP	0 530 129	A1	Danisco A/S	03-03-1993		
		WO	93/20216		University Technologies International, Inc	10-14-1993		
		WO	91/00917	A1	Mass. Inst. of Tech.	01-24-1991		
		WO	98/06854	A1	Monsanto Company	02-19-1998		
		WO	98/54342	A1	Joseph Atabekov, et al.	12-03-1998		

Examinee Signature	<i>E. M. Elwain</i>	Date Considered	1/3/05
--------------------	---------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.



Please type a plus sign (+) inside this box →



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
Examiner Name		Attorney Docket Number	MBX 041
Sheet	2	of	6

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
EM		BEVAN, et al., "Structure and transcription of the nopaline synthase gene region of T-DNA," <i>Nucleic Acids Res.</i> 11:369-85 (1983).	
		BLACK, et al., "Cloning, sequencing, and expression of the <i>fadD</i> gene of <i>E. coli</i> encoding acyl coenzyme A synthetase," <i>J. Biol. Chem.</i> 267:25513-25520 (1992).	
		CLOUGH & BENT, "Floral di: a simplified method for Agrobacterium-mediated transformation of <i>Arabidopsis thaliana</i> ," <i>Plant Journal</i> 16:735-743 (1998)	
		CUBITT, et al., "Understanding, improving and using green fluorescent proteins," <i>Trends Biochem. Sci.</i> 20(11):448-55 (1995).	
		DASGUPTA, et al., "Co-ordinated expression of multiple enzymes in different subcellular compartments in plants," <i>The Plant Journal</i> 16:107-16 (1998).	
		FIEDLER, et al., "PhaG-mediated synthesis of poly(3-hydroxyalkanoates) consisting of medium-chain-length constituents from nonrelated carbon sources recombinant <i>Pseudomonas fragi</i> ," <i>Applied and Environmental Microbiology</i> 66:2117-2124 (2000).	
		FROMM, et al., "Inheritance and expression of chimeric genes in the progeny of transgenic maize plants," <i>Biotechnology (N.Y.)</i> 8(9):833-39 (1990).	
		GASSER & FRALEY, "Genetically Engineering Plants for Crop Improvement," <i>Science</i> 244:1293-1299 (1989).	
		HOFFMANN, "The pseudomonas aeruginosa phaG gene product is involved in the synthesis of polyhydroxyalkanoic acid consisting of medium-chain-length constituents from non-related carbon sources," <i>FEMS Microbiology Letters</i> 184:253-259 (2000).	
		HOOD et al., "The hypervirulence of <i>Agrobacterium tumefaciens</i> A281 is encoded in a region of pTiBo542 outside of T-DNA," <i>J. Bacteriol.</i> 168:1291-301 (1986).	

Examiner's Signature	ETM	Date Considered	1/3/05
----------------------	-----	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 If possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/APTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/991,152
Filing Date	November 16, 2001
First Named Inventor	Stephanie Aquin
Group Art Unit	1645
Examiner Name	
Attorney Docket Number	MBX 041

3 of 6

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SM		HUISMAN, et al., "Metabolism of poly(3-hydroxyalkanoates) (PHAs) by <i>Pseudomonas oleovorans</i> . Identification and sequences of genes and function of the encoded proteins in the synthesis and degradation of PHA," <i>J. Biol. Chem.</i> 266(4):2191-08 (1991).	
		JEFFERSON, et al., "GUS fusions: β -glucuronidase as a sensitive and versatile gene fusion marker in higher plants," <i>EMBO J.</i> 6(13):3901-07 (1987).	
		KATO, et al., "Production of a novel copolyester of 3-hydroxybutyric acid with a medium-chain-length 3-hydroxyalkanoic acids by <i>Pseudomonas</i> sp. 61-3 from sugars," <i>Appl. Microbiol. Biotechnol.</i> 45:363-70 (1996).	
		KHOUDI, et al., "An alfalfa rubisco small subunit homologue shares cis-acting elements with the regulatory sequences of the RbcS-3A gene from pea," <i>Gene</i> 197:343-51 (1997).	
		KLINKE, et al., "Production of medium-chain-length poly(3-hydroxyalkanoates) from gluconate by recombinant <i>Escherichia coli</i> ," <i>Appl. Environ. Microbiol.</i> 65:540-548 (1999).	
		KYOZUKA, et al., "Anaerobic induction and tissue-specific expression of maize <i>Adh1</i> promoter in transgenic rice plants and their progeny," <i>Mol. Gen. Genet.</i> 228(1-2):40-48 (1991).	
		LEE, et al., "Biosynthesis of copolyesters consisting of 3-hydroxybutyric acid and medium-chain-length 3-hydroxyalkanoic acids from 1,3-butanediol or from 3-hydroxybutyrate by <i>Pseudomonas</i> sp. A33," <i>Appl. Microbiol. Biotechnol.</i> 42: 901-909 (1995).	
		MADISON & HUISMAN, "Metabolic engineering of Poly(3-Hydroxyalkanoates): From DNA to Plastic," <i>Microbiology and Molecular Biology Reviews</i> 63:21-53 (1999).	
		MALIGA, et al., <i>Methods in Plant Molecular Biology: A Laboratory Course Manual</i> , Cold Spring Laboratory Press: New York, 1995.	
		MARTINEZ, et al., "pACYC184-derived cloning vectors containing the multiple cloning site and lacZ α reporter gene of pUC8/9 and pUC18/19 plasmids," <i>Gene</i> 68:159 (1988).	

Examiner's Signature	<i>SM</i>	Date Considered	1/3/05
----------------------	-----------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box →

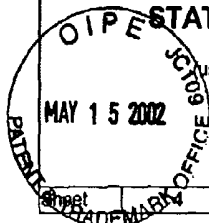


PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
		Examiner Name	
Attorney Docket Number	MBX 041		



OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T‡
EM		MATESANZ, et al., "The cloning and expression of Pfacs1, a Plasmodium falciparum fatty acyl coenzyme A synthase-1 targeted to the host erythrocyte cytoplasm," <i>J. Mol. Biol.</i> 291:59-70 (1999).	
		MCELROY, et al., "Isolation of an efficient actin promoter for use in rice transformation," <i>Plant Cell</i> . 2(2):163-71 (1990).	
		MOLONEY, et al., "High efficiency transformation of <i>Brassica napus</i> using <i>Agrobacterium</i> vectors," <i>Plant Cell Reports</i> 8:238-42 (1989).	
		NAWRATH, et al., "Review of Polyhydroxyalkanoate formation in the model plant <i>Arabidopsis Thaliana</i> ," <i>PNAS</i> 91:12760-12764 (1994).	
		OCHSNER, et al., "Isolation, characterization, and expression in <i>Escherichia coli</i> of the <i>Pseudomonas aeruginosa</i> rhLaB genes encoding a rhamnosyltransferase involved in rhamnolipid biosurfactant synthesis," <i>J. Biol. Chem.</i> 269:19787-19795 (1994).	
		ODELL, et al., "Identification of DNA sequences required for activity of the cauliflower mosaic virus 35S promoter," <i>Nature</i> 313(6005):810-12 (1985).	
		OLSEN, et al., <i>Plant Cell</i> 5:941-952 (1993).	
		OWEN & PEN, eds., <i>Transgenic Plants: A Production System for Industrial and Pharmaceutical Proteins</i> John Wiley & Sons Ltd: England, 1996.	
		PANG, et al., "An improved green fluorescent protein gene as a vital marker in plants," <i>Plant Physiol.</i> 112:893-900 (1996).	
		PLANT, et al., "Regulation of an <i>Arabidopsis</i> oleosin gene promoter in transgenic <i>Brassica napus</i> ," <i>Plant Mol. Biol.</i> 25(2):193-205 (1994).	

Examiner's Signature	<i>[Signature]</i>	Date Considered	1/3/05
----------------------	--------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number ‡ See attached Kinds of U.S. Patent Documents. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ** Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *** Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

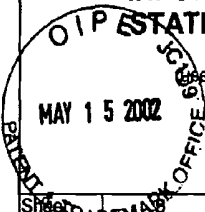
+

Please type a plus sign (+) inside this box →



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) 		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
		Examiner Name	
		Attorney Docket Number	MBX 041
Sheet 1	of 6		

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
em		POTRYKUS & SPANGENBERG, <u>Gene Transfer to Plants</u> , Springer-Verlag:Berlin Heidelberg New York, 1995.	
		REHM, et al., "A new metabolic link between fatty acid <i>de Novo</i> synthesis and polyhydroxyalkanoic acid synthesis," <i>J. Biol. Chem.</i> 273:24044-51 (1998).	
		REUSCH, "Low molecular weight complexed [poly(3-hydroxybutyrate): a dynamic and versatile molecule in vivo," <i>J. Microbiol.</i> 41(suppl. 1):50-54 (1995).	
		ROWLEY & HERMAN, "The upstream domain of soybean oleosin genes contains regulatory elements similar to those of legume storage proteins," <i>Biochim. Biophys. Acta.</i> 1345(1):1-4 (1997).	
		SHEEN, "Protein phosphatase activity is required for light-inducible gene expression in maize," <i>J. EMBO</i> 12:3497-505 (1993).	
		SLIGHTOM, et. al., <i>Proc. Natl. Acad. Sci.</i> 80 USA:1897-901 (1983).	
		SÖHLING & GOTTSCHALK, "Molecular analysis of the anaerobic succinate degradation pathway in <i>Clostridium kluyveri</i> ," <i>J. Bacteriol.</i> 178:871-880 (1996).	
		STEINBÜCHEL and VALENTIN, "Diversity of bacterial polyhydroxyalkanoic acids," <i>FEMS Microbiol. Lett.</i> 128:219-28 (1995).	
		TIMM & STEINBÜCHEL, "Cloning and molecular analysis of the poly(3-hydroxyalkanoic acid) gene locus of <i>Pseudomonas aeruginosa</i> PAO1," <i>Eur. J. Biochem.</i> 209(1):15-30 (1992).	
		VAN BEILEN, et al., "DNA sequence determination and functional characterization of the OCT-plasmid-encoded <i>alkJKL</i> genes of <i>Pseudomonas oleovorans</i> ," <i>Mol. Microbiol.</i> 6: 3121-36 (1992).	

Examiner's Signature		Date Considered	1/3/05
----------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) MAY 15 2002 PATENT AND TRADEMARK OFFICE 605		Applicant Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
		Examiner Name	
Sheet 1 of 6	Attorney Docket Number	MBX 041	

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
gm		VOGEL & BONNER, "Acetylornithinase of Escherichia Coli: Partial purification and some properties," J. Biol. Chem. 218:97-106 (1956).	
gm		WILLIAMS & PEOPLES, "Biodegradable plastics from plants," CHEMTECH 26:38-44 (1996).	

Examiner's Signature	<i>ET McEl...</i>	Date Considered	1/3/05
----------------------	-------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.